

### **IN THE CLAIMS**

Please amend the claims as follows:

1. (Currently Amended) A computer-implemented method for assigning resources to items, comprising:

identifying one or more assignment strategies for assigning one or more resources to one or more items;

for each identified assignment strategy, determining an assignment score for each item/resource pair;

summing the assignment scores for each item/resource pair;

multiplying each assignment score sum by an assignment cost associated with the sum's corresponding item/resource pair to produce a cost matrix; and

applying [[the]] a Hungarian method to the cost matrix.

2. (Original) The method according to Claim 1, wherein the resources are buffers.

3. (Currently Amended) The method according to Claim 2, wherein at least one of the assignment strategies is chosen from the group consisting of strategies based on [[the]] a storage level of the buffers, strategies based on [[the]] a set-up time requirements of the buffers, strategies based on [[the]] priorities of storing items in the buffers, and strategies based on [[the]] compatibility of multiple items in a single buffer.

4. (Currently Amended) The method according to Claim 2, wherein all of the assignment strategies are chosen using Game theory from the group consisting of strategies based on [[the]] a storage level of the buffers, strategies based on [[the]] a set-up time requirements of the buffers, strategies based on [[the]] priorities of storing items in the buffers, and strategies based on [[the]] compatibility of multiple items in a single buffer.

5. (Original) The method according to Claim 1, wherein the resources are storage tanks.

6. (Currently Amended) A computer-readable medium having computer-executable instructions for performing a method comprising:

identifying one or more assignment strategies for assigning one or more resources

to one or more items;

for each identified assignment strategy, determining an assignment score for each item/resource pair;

summing the assignment scores for each item/resource pair;

multiplying each assignment score sum by an assignment cost associated with the sum's corresponding item/resource pair to produce a cost matrix; and

applying [[the]] a Hungarian method to the cost matrix.

7. (Original) The method according to Claim 6, wherein the resources are buffers.

8. (Currently Amended) The method according to Claim 7, wherein at least one of the assignment strategies is chosen from the group consisting of strategies based on [[the]] a storage level of the buffers, strategies based on [[the]] a set-up time requirements of the buffers, strategies based on [[the]] priorities of storing items in the buffers, and strategies based on [[the]] compatibility of multiple items in a single buffer.

9. (Currently Amended) The method according to Claim 7, wherein all of the assignment strategies are chosen from the group consisting of strategies based on [[the]] a storage level of the buffers, strategies based on [[the]] a set-up time requirements of the buffers, strategies based on [[the]] priorities of storing items in the buffers, and strategies based on [[the]] compatibility of multiple items in a single buffer.

10. (Original) The method according to Claim 6, wherein the resources are storage tanks.

11. (New) The method according to Claim 2 wherein the buffers comprise airplanes.

12. (New) The method according to Claim 1 wherein the cost of assigning resources to items is measured in monetary units, time units or space units.